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Jakob Blattner

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EXAMINER

DHINGRA, RAKESH KUMAR

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/564,066	<b>Applicant(s)</b> BLATTNER ET AL.	
	<b>Examiner</b> RAKESH K. DHINGRA	<b>Art Unit</b> 1792	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 5/13.08 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 03 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: 19 and 26.  
 Claim(s) objected to: None.  
 Claim(s) rejected: 1-3, 15-18 and 20-25.  
 Claim(s) withdrawn from consideration: None.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13. ☐ Other: see continuation sheet.

/Rakesh K Dhingra/  
 Examiner, Art Unit 1792

/Karla Moore/  
 Primary Examiner, Art Unit 1792

## Response to applicant's arguments

## Drawings

A) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they still do not include the following reference sign(s) mentioned in the description:

1) Figure 1: Reference number 100 (device) is not shown in the drawing (per specification – para. –0060);

2) Figures 7-28: Reference number 80 (guide elements) is not shown in the drawings (per specification – para. 0068).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required.

B) Further, applicant has now amended drawing 20-28 to indicate handling means 32. As per para. 0061 of the specification, applicant also discloses that handling of storage rings is done by means of tool 50. In view of this, examiner has interpreted that tool 50 and handling means 32 imply the same item. Applicant may clarify if he has a different interpretation in this regard.

C) Further, even though the drawings 20–28 have now been amended to include reference number 220 for the “moving means” (para. 0082 of specification), the specification has still unclear portions, e.g. 1) about how the tool 50 is directed by the drive 220 to obtain the claimed limitation “whereby said tool divides said plurality of stacked ----- and said lower stack of said storage element”, and 2) if the handling means 32 and the tool 50 denote the same item (as indicated in para. 0061 of the specification). Applicant may clarify these issues, without adding new matter to specification.

## Response to Arguments

Applicant's arguments with respect to claims 1-13 and 15-26 have been considered and response is given hereunder.

1) Claims 1-8, 19 (Abe over Kato et al) - Applicant's arguments that compression coil 6 of Abe is not a tool as claimed in claim 1 since the compression coil 6 acts as a shock absorbing material between nail plates 2a, 2b and that the compression coil spring 6 is not moved via a moving means to separate the nail plates 2a, 2b as claimed, is not found persuasive since Abe teaches the claimed limitation “a tool 6 having a first storage element contact surface and a second storage element contact surface, said first storage element contact surface engaging a first storage element;

a moving means 5 for moving said tool relative to said stacked storage elements 2a, 2b, said moving means moving said tool with said first storage element contact surface engaged with said first storage element such that said second storage element contact surface engages a second storage element adjacent said first storage element”.

As also explained under the claim rejections, since claim 1 limitation “—whereby said tool divides ---and said lower stack of storage elements” is not interpreted as “means plus function” limitation under 35 USC 112, 6th paragraph since it does not satisfy the third prong of the 3-prong analysis, the above referred claim limitation “whereby said tool divides said plurality of stacked ----- and said lower stack of said storage element”, is considered to be functional limitation and since the apparatus of prior art meets the structural limitations of the claim, the same is considered capable of meeting the functional limitation. Applicant's further arguments about Abe and not Kato not teaching the above functional limitation (pages 14-16 of applicant's response) are thus moot in view of explanation given above. Further, responding to applicant's argument about combining the Kato reference with Abe, examiner states that Kato is cited for its teaching regarding means of depositing substrates 52a, 52c, since it would have been obvious to provide such means on the storage rings of Abe to obtain a minimum contact area to minimize damage to the substrate.

In view of above, rejection of claims 1-8 under 35 US 103 (a) over Abe in view of Kato is maintained.

However applicant's argument regarding claim 19, that in Abe no nail plate 2a and 2b is separated from another nail plate 2a and 2b since the nail plates are interconnected, and that the coil compression spring 6 (tool) is not moved with a first contact surface in contact with an adjacent storage element such that the second contact surface of the tool engages a selected storage element to be removed and thus do not meet claim limitation, “moving said stack of separable storage elements such that said tool is positioned in an area adjacent said selected storage element, said tool engaging one of said storage elements located adjacent said selected storage element such that said first contact surface is in contact with said adjacent storage element; moving said tool with said first contact surface in contact with said adjacent storage element such that said second contact surface engages said selected storage element, said adjacent storage element being located at a spaced location from said selected storage element when said second contact surface engages said selected storage element” is found to be persuasive. Therefore, the rejection has been withdrawn and the claim is indicated as allowable subject matter. Claim 26 which is a dependent claim of claim 19 is also indicated as allowable subject matter.

2) Claims 9-11, 22 (Abe over Kato et al and Tanaka) – applicant argues that the references as a whole provide no suggestion of using the teachings of Tanaka et al to modify either the array-pitch transfer apparatus of Abe et al or the wafer boat of Kato et al and the references together do not suggest the combination of features claimed.

Examiner responds that Abe teaches that substrates (LCD panels) stored on the storage elements are subjected to pressurization and degassing while in the storage container to maintain a controlled environment in the storage container (para. 0039). It would be obvious to combine Abe and Kato with Tanaka to provide clean air such that a clean space is enabled in the storage container to minimize contamination of the stored substrates. Thus Abe in view of Kato and Tanaka teach all limitations of claims 9-11, 22 and the rejection is maintained.

3) Claims 15-17, 20 and 26 (Abe over Kato et al Cerf) – applicant contends that similar to Abe and Kato, Cerf also fails to teach or suggest the claim limitation of a moving means that moves a tool with a first storage element contact surface of the tool engaged with a first storage element and with a second storage element contact surface engaged with a second storage element such that the second storage element is located at a spaced location from an upper stack of storage elements and a lower stack of storage elements. Cerf merely discloses two moving blade members 36A and 36B wherein each blade is moved via a respective air cylinder 1, 3 such that the blades are moved horizontally and vertically in a sequence to dislodge one tray from a lowermost end of a stack during each cycle of operation. However, Cerf does not teach or suggest a moving means to move one of the blades of with a blade contact surface in contact with one tray and another blade contact surface in contact with another tray to remove a selected tray from an upper and lower stack of trays as claimed.

Examiner responds that as explained above under claim 1, Abe in view of Kato teach claim 1 limitations pertaining to moving means and the tool, and that claim limitation “—moving means that moves a tool ----- and a lower stack of storage elements” is a functional limitation, which the apparatus of prior art (Abe in view of Kato) is considered ----- capable to meet. Further, Cerf is cited for its teaching of a tool with

its two contact surfaces 36A, 36B being offset relative to each other (e.g. Fig. 9 and col. 8, lines 5-10). Thus, Abe in view of Kato and Cerf teach claim 15 limitations and the rejection of claims 15-17, 20 is maintained.

4) Claim 21 (Abe over Kato et al and Matsuyama) – applicant argues that the references as a whole provide no suggestion of using the teachings of Tanaka et al to modify either the array-pitch transfer apparatus of Abe et al or the wafer boat of Kato et al and the references together do not suggest the combination of features claimed.

Examiner responds that Abe teaches that substrates (LCD panels) stored on the storage elements are subjected to pressurization and de-gassing while in the storage container to maintain a controlled environment in the storage container (para. 0039). Matsuyama et al is cited for its teaching of transport container 54 that is inserted into an external sealable transport container 12 having a hermetically sealed space 16 to enable transfer the substrates while enclosed in a clean environment and thus minimize contamination of substrates. It would have been obvious to one of ordinary skills in the art at the time of the invention to provide an external sealable container (as sealing means) for housing the transport container as taught by Matsuyama et al in the apparatus of Abe in view of Kato et al to enable transfer the substrates while enclosed in a clean environment and minimize contamination of substrates. Further, as explained above under claim 1, Abe in view of Kato teach claim 1 limitations pertaining to moving means and the tool, and that claim limitation “—moving means that moves a tool ----- and a lower stack of storage elements” is a functional limitation, which the apparatus of prior art (Abe in view of Kato) is considered capable to meet. Thus Abe in view of Kato and Matsuyama teach all limitations of claim 21 and the rejection is maintained.

4) Claim 23 (Abe over Kato et al, Tanaka and Matsuyama) –applicant argues that the references as a whole fail to disclose a moving means that moves a tool to separate a selected storage element from an upper stack of storage elements and a lower stack of storage elements. Further, the coil compression spring 6 (tool) of Abe et al. is not moved such that the spring 6 separates one storage element from a stack of storage elements and thus Abe et al. alone or in combination with the teachings of Kato et al., Tanaka et al. and Matsuyama et al fails to direct the person of ordinary skill in the art toward each feature of the claimed combination.

Examiner responds that Abe teaches that substrates (LCD panels) stored on the storage elements are subjected to pressurization and de-gassing while in the storage container to maintain a controlled environment in the storage container (para. 0039). Matsuyama et al is cited for its teaching of transport container 54 parts like cover 54b, bottom plate 54a and locking means 28 and a hermetically sealed space that would enable transfer the substrates while enclosed in a clean environment and thus minimize contamination of substrates. It would have been obvious to one of ordinary skills in the art at the time of the invention to provide the structure as taught by Tanaka and Matsuyama to enable transfer the substrates while enclosed in a clean environment and minimize contamination of substrates. Further, as explained above under claim 1, Abe in view of Kato teach claim 1 limitations pertaining to moving means and the tool, and that claim limitation “—moving means that moves a tool ----- and a lower stack of storage elements” is a functional limitation, which the apparatus of prior art (Abe in view of Kato) is considered capable to meet. Thus Abe in view of Kato, Tanaka and Matsuyama teach all limitations of claim 23 and the rejection is maintained.

5) Further, in view of claim 1 limitation “a moving means for moving said tool-----lower stack of said storage elements” not being interpreted as “means plus function” limitation under 35 USC 112, 6th paragraph since it does not satisfy the third prong of the 3-prong analysis, the rejection of claims 1-8, 12, 13, 15-17, 19, 20, 26 (Abe in view of Kato, Schneider and Cerf ), and those of remaining dependent claims 9-11, 18 and 21-25 is withdrawn.

#### Allowable Subject Matter

Claims 19, 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

#### Reasons for Allowance

Claim 19 – Closest prior art [(Abe et al – JP 2001-291759), Cerf (US 4,909,412)] do not teach claim limitation “moving said stack of separatable storage elements such that said tool is positioned in an area adjacent said selected storage element, said tool engaging one of said storage elements located adjacent said selected storage element such that said first contact surface is in contact with said adjacent storage element;

moving said tool with said first contact surface in contact with said adjacent storage element such that said second contact surface engages said selected storage element, said adjacent storage element being located at a spaced location from said selected storage element when said second contact surface engages said selected storage element;

moving said tool with said first contact surface in contact with said adjacent storage element and with said second contact surface in contact with said selected storage element such that said selected storage element is located at a spaced location from another adjacent storage element, whereby said selected storage element is separated from said stack of separatable storage elements” in the context of remaining limitations of the claim.